

CLAIMS:

1. A portable device for enabling vapourization of a chemical formulation into an atmosphere comprising:
 - 5 means for receiving a cartridge, the cartridge storing the chemical formulation;
 - heater means for contacting the chemical formulation and vapourizing the chemical formulation when the cartridge is inserted into the receiving means and the heater means is energised;
 - aperture means to enable vapourized chemical formulation to be guided
 - 10 therethrough into the atmosphere.
2. A device according to claim 1 wherein the receiving means is a recess having an opening.
- 15 3. A device according to claim 2 wherein the recess has guide means for guiding the cartridge when the cartridge is inserted into the recess.
4. A device according to claim 3 wherein the cartridge has indentation means.
- 20 5. A device according to claim 4 wherein the recess has projection means that provide an interference fit with the indentation means on the cartridge in order to locate the cartridge in a fixed relationship with respect to the heater means.
6. A device according to claim 3 wherein the cartridge has projection means.
- 25 7. A device according to claim 6 wherein the recess has indentation means that provides an interference fit with the projection means on the cartridge in order to locate the cartridge in a fixed relationship with respect to the heater means.
- 30 8. A device according to claim 4 or claim 7 wherein the indentation means is one or more notches.
9. A device according to claim 5 or claim 6 wherein the projection means is one or more lugs.

10. A device according to any one of claims 1 to 9 further comprising electrical circuit means in order to provide one or more pulses sequentially to the heater means so as to enable the heater means to vapourize the chemical formulation.

5 11. A device according to claim 10 wherein a partition divides the interior of the device into a first compartment and a second compartment.

12. A device according to claim 11 wherein the partition comprises an electrical circuit board housing an electrical circuit means.

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13. A device according to claim 12 wherein the electrical circuit board is double-sided providing electrical connections to electrical components of the electrical circuit means.

15 14. A device according to claim 13 wherein the electrical components of the electrical circuit means are located either on one or both sides of the electrical circuit board.

15. A device according to claim 14 wherein the heater means is mounted on a side
20 of the electrical circuit board within the first compartment, the first compartment housing the receiving means and having the aperture means so as to enable the heater means to contact the chemical formulation on the cartridge when the cartridge is inserted into the receiving means.

25 16. A device according to claim 10 constructed as two detachable members wherein a first member houses the receiving means and having aperture means and a second member houses a power supply.

17. A device according to claim 16 wherein the electrical circuit means is
30 mounted on an electrical circuit board acting as a partition between the first member and the second member.

18. A device according to claim 17 wherein the electrical circuit board is double-sided.

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19. A device according to claim 18 wherein the heater means is mounted on a side of the electrical circuit board in the first member to enable the heater means to contact the chemical formulation on the cartridge when the cartridge is inserted into the receiving means.

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20. A device according to claim 15 or claim 19 wherein contact between the heater means and the chemical formulation is through a wick means.

21. A device according to claim 20 further comprising switch means to activate
10 and deactivate power supplied to the heater means.

22. A device according to claim 21 further comprising indicator means to indicate battery charge status and/or device failure.